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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,801	03/22/2006	Takafumi Isori	ISER3001/GAL	4909

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EXAMINER

RAMDHANIE, BOBBY

ART UNIT	PAPER NUMBER
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1797

MAIL DATE	DELIVERY MODE
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12/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.	Applicant(s)	
10/572,801	ISERI ET AL.	
Examiner	Art Unit	
Bobby Ramdhanie, Ph.D.	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanegasaki et al (WO02/46356; An English translation of this document can be found in US759008. Rejections correspond to the English translation) in view of Kosaka et al (US5521699). Regarding Claim 1, Kanegasaki et al teaches a cell observation apparatus comprising a cell observation chamber (Figure 20) and optical observation means (Column 19 lines 8-19), said cell observation chamber comprising therein a pair of wells (Column 13 lines 11-44) and a flow path (Column 13 lines 45 to Column 15 line 12) for communicating of said wells and being arranged in such a manner that cells in cell suspension stored in one

of said pair of wells can react with chemotactic factor containing solution stored in the other of said wells to move from one to the other of said wells through said flow path (Column 8 lines 24-37), and said optical observation means being adapted to be capable of observing said cells moving through said flow path optically from outside said cell observation chamber (Column 8 lines 34-37). Kosaka et al teaches said optical observation means is housed in said casing below said cell observation chamber in such a manner that the optical axis thereof extends horizontally (Figure 1). Neither Kanegasaki et al, nor Kosaka et al teaches the cell observation chamber is housed in a casing of said cell observation apparatus in such a manner that the side of providing or removing said solutions thereof is partially exposed from said casing. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the combination of Kanegasaki et al and Kosaka et al so that the cell observation chamber is housed in a casing of said cell observation apparatus in such a manner that the side of providing or removing said solutions thereof is partially exposed from said casing because this would lead to a more versatile interchangeable system that would be able to process more samples, in less time, with more ease of use to the operator for putting in or removing samples.

4. For Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanegasaki et al in view of Kosaka et al. Regarding Claim 2, the combination of Kanegasaki et al and Kosaka et al teaches all of the claim limitations according to Claim 1. Kosaka et al further teaches the optical observation means comprises an optical system consisting of an objective lens (Figure 1 Item 28), a plurality of

reflecting mirrors (Figure 1 Item 42, 48), a half mirror (Figure 1 Item 34), a light source (Figure 1 Item 10), and a camera (Figure 1 Item 50), said objective lens being arranged near a window provided in said cell observation chamber so as to be capable of observing said cells moving through said flow path (Figure 1), and said light source being adapted to illuminate said cells moving through said flow path through said optical system to allow said camera to image said cells visibly (Figure 1). Neither Kanegasaki et al nor Kosaka et al teaches that the optical system consists of a stage movable in an X-Y two dimensional plane. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system so it is placed onto a stage movable in an X-Y two dimensional plane because it is commonly known in the art that one when dealing with optical systems that use a combination of light sources, mirrors, and lenses, that these systems need constant adjusting to make sure the system is correctly aligned. This alignment can change due to thermal expansion or contraction of any of one or all of these components. Therefore the easiest way to deal with this problem is to incorporate an X-Y Stage to manually adjust each component separately.

5. For Claim 3, Kanegasaki et al in combination with Kosaka et al teach all of the claim limitations according to Claim 1. Neither Kanegasaki et al nor Kosaka et al teaches that the cell observation apparatus according to claim 1, further comprising temperature control means, said temperature control means having means for controlling the atmosphere in said casing and the main body of said casing to be a predetermined temperature. It would have been obvious to one or

ordinary skill in the art at the time the invention was made to modify the combination of Kanegasaki et al and Kosaka et al to have temperature control means, said temperature control means having means for controlling the atmosphere in said casing and the main body of said casing to be a predetermined temperature because it is commonly known in the art that one when dealing with optical systems that use a combination of light sources, mirrors, and lens, that these systems need constant adjusting to make sure the system is correctly aligned. This alignment can change due to thermal expansion or contraction of any of these components. Therefore the easiest way to deal with this problem is to incorporate an X-Y Stage to manually adjust each component separately. In addition, it is commonly known in the art that different cell types require a certain temperature to respond well to stimuli such as chemotactic factors. It would have been obvious for one of ordinary skill in the art at the time the invention was made to include said temperature control means having means for controlling the atmosphere in said casing and the main body of said casing to be a predetermined temperature because without it, the cell type being studied may or may not respond well to the stimulus and the desired effect may not be observed.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined

application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

7. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1-3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 of copending Application No. 10/572746. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following:

Claims 1-3 of the instant application recite "A cell observation chamber comprising therein a pair of wells and a flow path for communicating of said wells and being arranged in such a manner that cells in cell suspension stored in one of said pair of wells can react with chemotactic factor containing solution stored in the other of said wells to move from one to the other of said wells through said flow path."

Claims 1-3 of Application Number 10/572746 recite "A cell observation chamber in an apparatus used for detecting cell chemotaxis and for isolating chemotactic

cells, said chamber comprising: One of said pair of wells is adapted to be provided or given with said cell suspension through each one of said plurality of through holes that are formed, respectively, in said cover block body, said packing member, and said substrate, while the other of said wells is adapted to be provided or given with said chemotactic factor containing solution through each one of said plurality of through holes that are formed, respectively..."

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

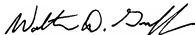
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bobby Ramdhanie, Ph.D. whose telephone number is 571-270-3240. The examiner can normally be reached on Mon-Fri 8-5 (Alt Fri off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BR



WALTER D. GRIFFIN
SUPERVISORY PATENT EXAMINER